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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,017	01/28/2002	W. Thomas Novak	06550006AA	2182

7590

09/04/2003

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EXAMINER

HASHMI, ZIA R

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,017

Applicant(s)

NOVAK ET AL.

Examiner

Zia R. Hashmi

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under U.S.C. 103(a) as being unpatentable over Shigaraki (Pub. No: 2002/0006675 A1), in view of Miwa (Pub. No: 2002/0071105 A1).

3. With respect to independent claims 1 and 13, Shigaraki discloses a lithography system (para 0002, lines 1-5 and para 0076, lines 1-2), comprising a reticle chamber having a chamber opening (para 0042, lines 1-7 and 11 in Fig. 1B); a reticle chamber maintenance panel or over which is mounted to the reticle chamber opening (para 0035, lines 3-6, and a reticle stage (para 0042, line 12 and 4 in Fig. 1A) housed within the reticle chamber (para 0042, lines 1-6, and accessible through the reticle chamber opening (para 0038, lines 1-8 and Fig. 1B).

4. With respect to dependent claims 6 and 19,, Shigaraki discloses a lithography system comprising a projection optic system, an illuminator optic system; and a reticle table mounted to the reticle stage and positioned between the projection and illuminator optic systems (para 0041, lines 13-14, para 0036, lines 1-6, para 0042, lines 3-8, and 2, 4 and 5 in Fig. 1A). His system further comprises a body structure, which is mounted to a lower portion of the chamber, the projection optic and the illuminator optic being mounted to the body structure during the removal of the reticle table and the stage

Art Unit: 2881

(11b, 11c, 11e, and 14 in Fig. 1A).

5. With respect to claims 1-5, 7-18, and 20, Shigaraki fails to disclose a removably mounted maintenance panel mounted to the reticle chamber. Miwa, however, discloses a maintenance panel which is removably mounted to the reticle chamber opening (para 0034, lines 6-14 and 12 in Fig. 1), wherein the chamber opening provides access to the reticle stage (11 and 12 in Fig. 1).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the method and apparatus of Shigaraki and Miwa, and add features like reticle chamber angled opening providing access to reticle stage, or pivotably mounted maintenance panel of semi-cylindrical shape, because Miwa teaches (para 0006, lines 4-6) that to achieve higher throughput, the exchange time for reticles and wafers which are frequently exchanged, must also be shortened.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hattori et al. disclose (Pub. No : US 2002/0074635 A1) an exposure apparatus with an open-close door mechanism

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zia Hashmi whose telephone number is (703) 305-0419. The examiner can normally be reached between 8.30 AM- 5 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703) 308-4116.


Application/Control Number: 10/056,017

Art Unit: 2881

Page 4

Zia Hashmi

August 20, 2003



JOHN R. LEE
SUPERVISORY PATENT EXAMINER
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